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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hans Rudolf Gygax

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EXAMINER

MCKANE, ELIZABETH L

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

12/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,716	Applicant(s) GYGAX ET AL.	
	Examiner ELIZABETH L. MCKANE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Wood et al. (US 5,266,492).

Wood et al. teaches an apparatus including a first reservoir **18**, a first capillary ingress channel **29** and a first capillary egress channel (first/left half of **36**), both channels being connected to the reservoir **18**. A carrier gas source **26** provides a carrier gas into the first capillary ingress channel **29**. The apparatus of Wood et al. further includes a second reservoir **30**, a second capillary ingress channel (second/right half of **36**) and a second capillary egress channel **38**, both second channels being connected to the reservoir **30**. The carrier gas source **26** is also in connection with the second capillary ingress channel. See Figure 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

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to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mühmel et al. (US 6,135,431) in view of Nightingale (GB 2,042,340).

With respect to claims 2-4, and 9-12, Mühmel et al. teaches a fragrance cartridge including a reservoir **3** for containing a fragrance material, an ingress channel (first end of tube **2**) and an egress channel (second end of tube **2**). See col.2, lines 34-40; col.3, lines 38-41. Filters **4** are located within the ingress and egress channels. In addition, active carbon particles are located adjacent each filter surface (col.3, line 20; Figure 1), which particles will intrinsically function as a filter. The cartridge further includes a carrier gas source connected to provide carrier gas on demand into the cartridge (col.3, lines 51-52). The ingress channels further comprise cannulae at either end for introduction and removal of carrier gas. Mühmel et al. further discloses that a scenting system may include multiple fragrance cartridges in one packaging unit. See col.3, lines 55-61. Mühmel et al. is silent with respect to the ingress and egress channels being capillary channels.

Nightingale teaches a fragrance cartridge **18** comprising a reservoir **19** of fragrance and capillary channels **20** for controlling emission of fragrance from the device (Figure V; page 1, lines 39-43). The fragrance is prevented from leaking from the reservoir by capillary action. See page 1, lines 58-59. The capillaries may be 0.4mm in diameter and 20 mm long. See page 2, lines 59-61. Moreover, Nightingale evidences that the emission rate is just over 27.8 ng/s (0.1 mg/hr). See page 3, lines

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5-7.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the capillary channels **20** of Nightingale in the ingress/egress channels of Mühmel et al. in order to achieve the advantages disclosed by Nightingales – that is, a constant emission of volatile until it is exhausted. Moreover, the use of the capillary channels of Nightingale would have allowed the user/manufacture to eliminate the membranes **6** and cannulae.

As to claim 8, Mühmel et al. discloses that a single support body may include multiple fragrance cartridges. Although not specifically taught by Mühmel et al., it would have been obvious to also include the source of carrier gas and a pump, in order to have all the necessary components of the system in a single packaging unit.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mühmel et al. and Nightingale as applied to claim 11 above, and further in view of Chiao et al (US 2002/0114744).

Mühmel et al. fails to teach that the multiple cartridges are embedded in the support body. Chiao et al. teaches a substantially flat, rectangular support body **001** having a plurality of cartridges **004** embedded therein. Each cartridge **004** includes capillary tubing **010** for transporting scent from a scent reservoir **016** to scent release openings **011**. See Figure 5. It would have been obvious to one of ordinary skill in the art to embed the cartridges of Mühmel et al. within a support body in order to provide a unitary and easily transportable construction.

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6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mühmel et al., Nightingale, and Chiao et al. as applied to claim 5 above, and further in view of Karp (US 7,261,812).

With respect to claim 6, the combination of Mühmel et al. with Nightingale and Chiao et al. fails to disclose producing the capillary channel by hot-embossing or laser etching. Karp teaches that it was known in the art at the time of the invention to fabricate capillary tubes using such techniques as embossing (col.9, lines 25-28; col.10, line 29). It would have been obvious to one of ordinary skill in the art to employ fabrication techniques already evidenced as successful in creating capillary tubes.

As to claim 7, the Mühmel et al. with Nightingale is silent with respect to a machine readable microprocessor chip. However, Chiao et al. discloses that the support body **001** includes a memory storage unit **031** which can be a memory chip. The memory storage unit can also store scent recovery sequence information for use in coordinating multimedia playback and scent recovery information. See Abstract. It would have been obvious to employ the memory storage unit of Chiao et al. in the fragrance cartridge(s) of Mühmel et al. in order to provide a further means of marketing the device.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH L. MCKANE whose telephone number is (571)272-1275. The examiner can normally be reached on Mon-Fri; 5:30 a.m. - 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/
Primary Examiner, Art Unit 1797

elm
7 December 2008